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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Roger W. Schmitz

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PATENT DOCKETING
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EXAMINER

HAN, JASON


ART UNIT

PAPER NUMBER

2875

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/698,751	Applicant(s) SCHMITZ, ROGER W. 	
	Examiner Jason M. Han	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12, 16, 18 and 20-42 is/are pending in the application.
4a) Of the above claim(s) 1-8, 20-37 and 42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9, 10, 12, 16, 18 and 38-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to Claims 9-10, 12, 16, 18, and 38 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments, see Pages 10-11, filed February 8, 2006, with respect to the 35 U.S.C. 112 rejections have been fully considered and are persuasive. The rejection of claims has been withdrawn.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the central axes of the parabolic holes being normal to a surface of the mounting region [Claim 40, Figure 5 as described in the specification] must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

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of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Election/Restrictions

4. Newly submitted Claim 42 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The lighting structure claimed is concerned with a single reflector, light source, and optical modifier arrangement rather than a plural light source arrangement.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, Claim 42 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

It should be noted that the following claims have been construed in light of the specification, but rendered the broadest interpretation as stated by the Applicant within the context of the claim language [MPEP 2111].

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 9 and 38-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Frankiewicz (U.S. Patent 3923394).

6. With regards to Claim 9, Frankiewicz discloses a lighting structure including:

- A reflector [Figure 1: (P, R₁₋₃)] having a first [Figure 1: (R₁)] and a second [Figure 1: (R₂)] concave parabolic hole formed therein, each shaped at least in part as a parabola, wherein each parabolic hole has a shape substantially in the form of $y = Ax^2$ and is formed about a central axis;
- A light source [Figure 1: (L₁₋₃)] in each of the parabolic holes; and
- A filter [Figure 1: (F)] positioned so that at least a portion of the light from the light sources passes therethrough, wherein the first and second parabolic holes are arranged so that the central axes intersect.

7. With regards to Claim 38, Franciewicz discloses a lens arranged [Figure 1: (O)] such that at least a portion of the light passing through the optical filter passes through the lens.

8. With regards to Claim 39, Franciewicz discloses a first filter [Figure 1: (F_V or F_C or F_M or F_Y)] for the first light source and a second filter [Figure 1: (F_V or F_C or F_M or F_Y)] for the second light source.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frankiewicz (U.S. Patent 3923394) as applied to Claim 9 above, and further in view of Kamada et al. (U.S. Publication 2002/0006040 A1).

Frankiewicz discloses the claimed invention as cited above, but does not specifically teach the light sources being light emitting diodes.

Kamada teaches an LED luminaire [Abstract].

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the lighting structure of Frankiewicz to incorporate the light emitting diodes of Frankiewicz, whereby, "These LED luminaires are advantageous in that the life is prolonged as compared with such light sources as the incandescent and fluorescent lamps, the lamp exchange or the like maintenance is freed, and handling ability is excellent" [Column 1, Paragraph 3].

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frankiewicz (U.S. Patent 3923394) in view of Kamada et al. (U.S. Publication 2002/0006040 A1) as applied to Claim 10 above, and further in view of Yamamoto et al. (U.S. Patent 6075648).

Frankiewicz in view of Kamada discloses the claimed invention as cited above, whereby Frankiewicz teaches each light source having a centroid and wherein the centroid is placed at a point along the central axis.

Niether Frankiewicz nor Kamada specifically teaches the centroid being placed at a point along the central axis from a bottom of the parabolic hole substantially at the distance of $1/4A$.

Yamamoto teaches a light source [Figure 1: (4)] having a centroid, wherein the centroid is placed along a central axis from a bottom of a parabolic hole of a reflector [Figure 1: (10A)] (substantially shaped as $Y=Ax^2$) at a distance of $1/4A$.

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the lighting structure of Frankiewicz in view of Kamada to incorporate the light source at a point along the central axis from a bottom of the parabolic hole substantially at the distance of $1/4A$, as taught by Yamamoto, since it is commonly known that by doing so, one may alter the beam width to a desired preference.

11. Claims 16 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frankiewicz (U.S. Patent 3923394) as applied to Claim 9 above, and further in view of Yagi (U.S. Patent 6896396).

Frankiewicz discloses the claimed invention as cited above, but does not specifically teach the reflector having a mounting region for the filter, whereby the filter is associated with the mounting region (re: Claim 16), and where the central axes of the parabolic holes are normal to a surface of the mounting region (re: Claim 40).

Yagi teaches a reflector [Figure 1: (12)] having a mounting region for a filter [Figure 1: (20)], whereby the mounting region has a surface that is normal to the central axis of the parabolic hole/reflector.

It would have been obvious to one ordinarily skilled in the art at the of invention to modify the lighting structure Frankiewicz to incorporate the mounting region of Yagi in order to ensure stability for the filter and prevent any loose components from incurring damage.

12. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frankiewicz (U.S. Patent 3923394) as applied to Claim 39 above, and further in view of Yagi (U.S. Patent 6896396).

Frankiewicz discloses the claimed invention as cited above, but does not specifically teach the reflector having a first mounting region for the first filter and a second mounting region for the second filter.

Yagi teaches a reflector [Figure 1: (12)] having a mounting region for a filter [Figure 1: (20)].

It would have been obvious to one ordinarily skilled in the art at the of invention to modify the reflector of Frankiewicz to incorporate mounting regions on the reflector for mounting the filters, as taught by Yagi, in order to ensure stability for the filter and prevent any loose components from incurring damage.

13. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frankiewicz (U.S. Patent 3923394).

Franciewicz discloses the claimed invention as cited above, but does not specifically teach the reflector having a major surface such that the central axes intersect at a point about one inch from the major surface.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to ensure the central axes intersect at a point about one inch from a major surface of the reflector, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215. In this case, it is obvious that one may merely alter the central axes to intersect at a point or distance of one inch from a major surface of the reflector to ensure appropriate mixing of the light [see Column 1, Lines 9-12] or entry into the mirror light duct [Column 1, Lines 48-52].

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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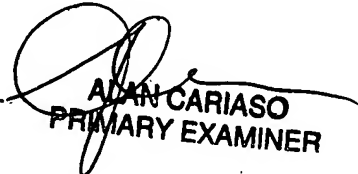
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason M Han
Examiner
Art Unit 2875

JMH (4/5/2006)


ADAM CARIASO
PRIMARY EXAMINER